

listing of said data elements of said first data file in the order in which said data elements are accessed by said application program.

4. The method of Claim 3 wherein said step of creating a second data file comprises the further steps of:

modifying said application program to create a resource list, said resource list for containing a listing of said several data elements of said data file in the order which they are first accessed by said application program;

executing said application said program, thereby creating said resource list;

appending said resource list to said first data file; and

creating said second data file from said first data file, said second data file having said data elements stored therein in the order said data elements are listed in said resource list.

5. The method of Claim 4, responsive to said step of creating said second data file from said first data file, the method comprising the further step of executing said application program, whereby said application program accesses said second data file.

3. 8. ^(Amended) The method of Claim 4 wherein said step of executing said application program comprises the further steps of:

sequentially accessing said data elements in said first data file;

for each data element in said first data file accessed by said application program, determining if said data element is contained in said resource list; and

responsive a determination by said determining step that said data element is not contained in said resource list, listing said data element in said resource list.

4. 7. ³ The method of Claim 6 wherein said listing step comprises the further step of listing said data element by data type and identification number.

5. 8. ^(Amended) The method of Claim 4 wherein said appending step comprises the further step of appending said resource list to said first data file as a data element.

6. 9. ^(Amended) The method of Claim 4 wherein said step of creating said second data file comprises the further step of:

for each data element listed in said resource file, appending said data element to said second data file.

13. 10. A method for improving the execution speed of an application program by optimizing the storage order of a plurality of data elements within a first data file accessed

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by an application program, the method for creating a second data file containing said data elements in the order in which said data elements are accessed by said application program, said method comprising the further steps of:

modifying said application program to create a resource list, said resource list for containing a listing of said plurality of data elements of said first data file in the order which they are first accessed by said application program, said modifying step including the further steps of:

- (a) sequentially accessing said data elements,
 - (b) for each data element accessed by said application program, determining if said data element is contained in said resource list, and
 - (c) responsive a determination by said determining step that said data element is not contained in said resource list, listing said data element in said resource list;
- creating said resource list by executing said application program modified by said modifying step;

appending said resource list to said first data file; and

creating said second data file having said data elements stored therein in the order said data elements are listed in said resource file by appending said data element to said second data file.

14. 11. The method of Claim 10¹³ wherein said listing step comprises the further step of listing said data element by data type and identification number.

15. 12. The method of Claim 11¹⁴, responsive to said step of creating said second data file from said first data file, comprising the further step of executing said application program, whereby said application program accesses said second data file.

13. Apparatus including processor, data storage device, memory, and at least one data bus for improving the execution speed of an application program implementable on said apparatus, said application program accessing a plurality of data elements within a first data file implemented on said memory, said apparatus further including a computer program which optimizes the storage order of said data elements.

14. The apparatus of Claim 13 wherein said computer program further comprises second data file means for creating, from said first data file, a second data file implemented on said memory, said second data file including a listing of said data

elements in the order in which said data elements are accessed by said application program.

15. The apparatus of Claim 14 wherein said second data file means further comprises:

application program modification means for modifying said application program to create a resource list, said resource list for containing a listing of said plurality of data elements of said first data file in the order which said data elements are first accessed by said application program;

means for executing said application said program, thereby creating said resource list;

resource list appending means for appending said resource list to said first data file; and

data file creation means for creating said second data file having said data elements stored therein in the order said data elements are listed in said resource file.

8. 16. ^(Amended) The apparatus of Claim ^{28 7} 15 further comprising means for executing said application program utilizing said second data file.

9. 17. ^(Amended) The apparatus of Claim ^{28 7} 15 wherein said means for executing said application program further comprises:

means for accessing said data elements in execution order;

determination means for determining if each of said data elements accessed by said application program is contained in said resource list; and

responsive a determination by said determining means that said data element is not contained in said resource list, list means for listing said data element in said resource list.

10. 18. ⁹ The apparatus of Claim 17 wherein said list means further comprises means for listing said data element by data type and identification number.

11. 19. ^(Amended) The apparatus of Claim ^{28 7} 15 wherein said resource list appending means further comprises means for appending said resource list to said data file as a data element.

12. 20. ^(Amended) The apparatus of Claim ^{28 7} 15 wherein said data file creation means further comprises means for appending for each data element listed in said resource file to said second data file.